Appl. No. 10/721,877

Amendment dated: January 5, 2006 Reply to OA of: October 5, 2005

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1(currently amended). A biodegradable block copolymer of the following formula (I):

$$R_{1} = \left(O - CH_{2} - C\right)_{X} \left(O - CH - C\right)_{Y} \left(O - CH_{2} - CH_{2}\right)_{Z} OR_{3}$$
(I);

wherein R₁ is hydrogen, or $-C(=O)-R_2$; R₂ is C₇₋₃₀ alkyl substituted or unsubstituted with functional groups or hydrogen; R₃ is hydrogen, or C₁₋₆ alkyl; and x, y or z individually is an integer greater than 0; and said polymer is thermo-sensitive polymer having an LCST ranging from 15°C to 30°C.

2(original). The polymer of claim 1, wherein said R₁ is selected from the group consisting of cholic acid, fatty acid, folic acid and cholesterol.

3(original). The polymer of claim 1, wherein said R2 is:

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4(original). The polymer as claimed in claim 1, wherein said R₃ is methyl.

5(original). The polymer as claimed in claim 1, wherein said R_2 is hydrogen, and said polymer is applied for drug releasing or embolic agents.

6(original). The polymer as claimed in claim 1, wherein the molecular weight of the hydrophobic block:

ranges from 1000 to 6000.

7(original). The polymer as claimed in claim 1, wherein the molecular weight of said hydrophilic block:

$$CH_2$$
 CH_2 CH_3 CH_3

ranges from 200 to 5000.

8(original). The polymer as claimed in claim 2, wherein x: y: z is 3-18:11-66:4-114.

9(canceled).

10(original). The polymer as claimed in claim 1, wherein said polymer is functioned as an embolic agent.